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 (Signature) July 22, 2004 (Date of Signature)  
Georgann S. Grunebach, Reg. No. 33,179

Customer Number 020991

PATENT  
Docket No: PD-990202

**OFFICIAL****IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicants: Robert E. Vaughan, et. al.

Date: July 23, 2004

Serial No: 09/664,082

Group Art Unit: 2666

Filed: September 18, 2000

Examiner: F. Duong

Title: Multimode Transmission System Using TDMA

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Sir:

Applicants wish to thank the Examiner for considering the present application in accompaniment with the Request for Continued Examination being filed concurrently herewith. Claims 1-17 are pending in the application. The Applicants respectfully request continued examination of claims 1-6, 8-15, and 17. Claims 7 and 16 are cancelled. Claims 1-6, 8-15, and 17 are amended herein to include limitations that bring the claims into better condition for allowance. It is respectfully requested that the Examiner reconsider the present application in view of the amendments and remarks herein.

Please amend the above-identified application as follows:

U.S.S.N. (09/664,082)

PD-990202

**In The Detailed Description:**

Please amend page 7, line 26-page 8, line 6 as follows:

Satellite antenna 30 is an advanced transmit antenna system, which requires beam-shaping and beam power control features or systems 31, to enable TDMA switching between shaped beams and spot beam modes of the antenna. These antenna features 31 allow for the dynamic partitioning of satellite 12 system's capacity between wide-area broadcasts and localized point-to-point service and efficient utilization of the satellites transmission power.

Please amend page 13, lines 15-22 as follows:

is dynamically scheduled from the data queues in the satellite 12 on-board processor 65 utilizing an interference-check mechanism 67 that ensures sufficient distance between simultaneous downlink beams. A power check mechanism 69 also ensures that the required power for the sum of the total spot beam is less than or equal to the total available RF power in the transmit antenna.